

draft amendment

1. (currently amended) An interface, comprising:
a graphical user interface area located in a lower display corner responsive to a natural motion by a user associated with an end of a range of the natural motion and, comprising:
an arc shaped persistent graphic starting near a first display edge and ending near a second display edge and defining the interface area where the arc is substantially perpendicular to a natural motion path of the natural motion; and
controls initiating an action, located in the interface area and accessible via the natural motion.
2. (original) An interface as recited in claim 1, wherein the natural motion is a curve associated with movement of a hand of the user when an elbow of the user is pivoted.
3. (original) An interface as recited in claim 2, wherein a location responsive to the natural motion of the user hand is defined by the natural motion passing through a substantial center area of a display area.
4. (original) An interface as recited in claim 1, wherein the natural motion is a curve associated with movement of a hand of the user when an elbow of the user is pivoted and one of a wrist of the user is rotated and fingers of the user are moved.
5. (currently amended) An interface, comprising:
an interface area located in a lower display corner responsive to a natural motion by a user and associated with an end of a range of the natural motion, comprising:
an arc shaped graphic starting near a first display edge and ending near a second display edge and defining the interface area where the arc is substantially perpendicular to a natural motion path of the natural motion; and
controls located in the interface area and accessible via the natural motion, wherein an interface location responsive to the natural motion of the user is a lower corner of a display area.
6. (original) An interface as recited in claim 1, wherein the graphic is a shape

corresponding to an arc shaped curve and the controls are positioned in accordance with the curve.

7. (original) An interface as recited in claim 6, wherein a radius of the arc shaped curve is at least a radius of a menu of one of the controls.

8. (previously presented) An interface as recited in claim 6, wherein a control closest to a display area is positioned along the curve at least a radius of a menu of the control from a display edge.

9. (original) An interface as recited in claim 1, wherein a menu associated with one of the controls has a layout responsive to the curve.

10. (original) An interface as recited in claim 1, wherein a marking menu associated with one of the controls has a layout where a downward stroke brings up additional tool palettes and/or dialogs.

11. (original) An interface as recited in claim 1, wherein the interface is located in a lower left corner of a display area and the controls of the interface are arranged as one of a convex arc across the corner, a concave arc across the corner, a line across the corner, an array in the corner, a convex corner across the corner, a convex arc with a linear portion across the corner, a sectioned pie in the corner, a sectioned pie in the corner and extending across the display area, and a rotatable circle intersecting both sides of the corner.

12. (currently amended) A graphical user interface, comprising:
a persistent interface having an interface arc shape, located in lower corner of a display area, having graphics for controls arranged along the interface arc and having control hit zones each with a zone shape responsive to an approach arc defined by a dominant motion arc of a motion of a user and associated with an end of a range of a natural motion by a user where the approach arc is substantially perpendicular to a natural motion path of the natural motion and with the graphics of the controls being located responsive to one-shot function or menu pop-up function with a pop-up menu radius.

13. (original) An interface as recited in claim 12, wherein the zone shape comprises

one of a wedge, a curved sided triangle and a curved sided trapezoid.

14. (original) An interface as recited in claim 12, wherein the zones have non-coincident, dominant arc approach paths.

15. (currently amended) An graphical user interface for a digitizer based drawing application, comprising:

a persistent arc shaped semicircular graphic located in a lower corner of a display area of the drawing based application associated with an end of a range of a natural motion by a user; and

controls located essentially in an arc in the graphic where the arc is substantially perpendicular to a natural motion path of the natural motion, said controls comprising:

a tool control providing a menu for selecting a drawing tool of the application; and

a color control providing a menu for selecting paint color applied by a drawing tool of the application.

16. (previously presented) An interface as recited in claim 15, wherein said controls further comprise:

a minimize control located on a side edge of the graphic and providing a minimize function for the interface;

a page control located adjacent a bottom edge of the graphic and providing a page change function for drawing pages of the application;

an edit control located adjacent to the page control and providing an undo function for the application; and

a tool type control located between the tool control and the color control and providing a menu for selection a tool type of the application

17. (currently amended) An interface as recited in claim 16, wherein the graphic comprises a arc shaped semicircular band.

18. (original) An interface as recited in claim 16, wherein pop-up menus pop-up in association with the selected control and at a distance from side and bottom edges of the graphic to allow all menu commands to be displayed.

19. (currently amended) An graphical user interface for a tablet personal computer based drawing application using a stylus, comprising:

a arc shaped semicircular persistent graphic located in a lower corner of a display area of the drawing based application responsive to a natural motion by a user wherein the natural motion is a curve associated with movement of a hand of the user when an elbow of the user is pivoted and associated with an end of a range of the natural motion by a user; and

controls located essentially in an arc in the graphic where the arc is substantially perpendicular to a natural motion path of the natural motion and activated by the stylus, said controls comprising:

a minimize control located on a side edge of the graphic and providing a minimize function for the interface;

a page control located adjacent a bottom edge of the graphic and providing a page change function for drawing pages of the application;

an undo control located adjacent to the page control and providing an undo function for the application;

a tool control located adjacent the minimize control and providing a menu for selecting a tool of the application;

a color control located adjacent the undo control and providing a menu for selecting paint color applied by a tool of the application; and

a tool type control located between the tool control and the color control and providing a menu for selection a tool type of the application,

wherein a radius of the arc shaped curve is at least a radius of a menu of one of the controls,

wherein a control closest to a display area is positioned along the curve at least a radius of a menu of the control from a display edge, and

wherein a marking menu associated with one of the controls has a layout where a downward stroke brings up additional tool palettes and/or dialogs.

20. (currently amended) A method, comprising:

mapping controls of a persistent graphical user interface in an arc shape at a lower corner location responsive to an approach arc associated with an end of a range of a natural user motion, with a radius responsive to an underlying menu activatable via one of the controls and where the arc starts near a first display edge and ends near a second display edge and arc is substantially perpendicular to a natural motion path of the natural motion; and

allowing a user to activate the controls.

21. (currently amended) A method, comprising:

mapping controls of an graphical user interface in an arc shape at a lower display corner location responsive to an approach arc associated with an end of a range of a natural user motion, with a radius responsive to an underlying menu activatable via one of the controls and where the arc starts near a first display edge and ends near a second display edge and is substantially perpendicular to a natural motion path of the natural motion; and

allowing a user to activate the controls, wherein the location comprises a display area corner.

22. (previously presented) A method as recited in claim 21, wherein the corner is lower right corner for a left-handed person and a lower left corner for a right-handed person

23. (original) A method as recited in claim 20, wherein the mapping maps controls on the arc responsive to a function of the controls.

24. (original) A method as recited in claim 20, further comprising minimizing the interface responsive to activation of a minimize control.

25. (original) A method as recited in claim 20, wherein the allowing comprises:

displaying a menu upon a touch input and allowing a user to select an item of the menu; displaying a menu and performing an interaction upon a dwell input; and performing a function upon a stroke input.

26. (previously presented) A method, comprising:

mapping controls of an graphical user interface in an arc shape at a location responsive to an approach arc and with a radius responsive to an underlying menu activatable via one of the controls; and

allowing a user to activate the controls, wherein the allowing comprises:

displaying a menu upon a touch input and allowing a user to select an item of the menu;

displaying a menu and performing an interaction upon a dwell input; and

performing a function upon a stroke input, and wherein if a user is inking from a

drawing canvas and the inking crosses into the menu, inking still occurs on the canvas.

27 (currently amended) A computer readable storage for controlling a computer by mapping controls of a persistent graphical user interface in an arc shape at a lower corner location responsive to an approach arc associated with an end of a range of a natural user motion, where the arc shape starts near a first display edge and ends near a second display edge and is substantially perpendicular to a natural motion path of the natural motion and with a radius responsive to an underlying menu activatable via one of the controls and allowing a user to activate the controls.

28 (currently amended) An apparatus, comprising:

a display; and

a processor positioning a persistent graphical user interface of multiple controls in a lower corner of the display associated with an end of a range of a natural user motion, the interface having an interface arc shape where the arc shape starts near a first display edge and ends near a second display edge and is substantially perpendicular to a natural motion path of the natural motion and positioning the controls on the interface arc at positions responsive to a natural motion arc of a user when moving a hand from a center of the display toward the corner.

29 (original) An apparatus as recited in claim 28, wherein the processor positions the controls responsive to a function of the controls.

30 (original) An apparatus as recited in claim 28, further comprising a stylus-based input system coupled to the processor and the display, and activating the controls responsive to a tap of a stylus on one of the controls, a dwell of the stylus over one of the control and a stroke of the stylus on one of the controls.

31. (currently amended) An interface, comprising:

a fixed position, arc semicircular shaped, display edge intersecting menu bar interface graphic located in a lower display corner responsive to a natural motion by a user associated with an end of a range of the natural motion where the arc shaped semicircular shaped graphic is substantially perpendicular to a natural motion path of the natural motion and starts near a first display edge and ends near a second display edge; and

controls located in the interface graphic and accessible via the natural motion.

32. (currently amended) An interface, comprising:

a first graphical user interface located in a lower display corner responsive to a natural motion by a user associated with a first end of a range of the natural motion; and

second graphical user interface located in a display corner responsive to the natural motion by a user associated with a second end of the range of the natural motion; and

said first and second graphical user interfaces each comprising:

an arc shaped persistent graphic defining the interface area where the arc starts near a first display edge and ends near a second display edge and is substantially perpendicular to a natural motion path of the natural motion; and

controls initiating an action, located in the interface area and accessible via the natural motion.